



NORTH LIBERTY BOARD OF APPEALS
MEETING NOTICE AND AGENDA
Wednesday, August 31, 2016, 6:30 PM
City Council Chambers
1 Quail Creek Circle

- 1. ROLL CALL**
- 2. AGENDA APPROVAL**
- 3. APPOINTMENT OF CHAIRPERSON**
- 4. BUILDING AND FIRE CODES:** Public hearing to consider amendment to Chapter 15 of the Municipal Code regulating building construction within City of North Liberty by recommending the adoption and amendments of the Building and Fire Codes.
 - a. Staff Presentation
 - b. Public Comments
 - c. Questions and Comments
 - d. Recommendation to the City Council
- 5. ADJOURNMENT**

Chapter 157, "North Liberty Building Code"

157.01 Short Title	157.04 Availability of the Building Code
157.02 International Building Codes Adopted	157.05 Board of Appeals
157.03 Amendments to the International Building Code and the International Residential Code	

157.01 SHORT TITLE.

The ordinance codified in this chapter shall be known as the "North Liberty Building Code," may be cited as such, and will be referred to as such herein in this chapter. Any higher standards in the state statute or city ordinance shall be applicable.

157.02 INTERNATIONAL BUILDING CODES ADOPTED.

Except as hereinafter modified, that certain building codes known as the *International Building Code*, 2015 Edition, including Appendix H titled "Signs," the *International Residential Code*, 2015 Edition, including Appendices E titled "Manufactured Housing Used as Dwellings," F titled "Radon Controlled Methods," G titled "Swimming Pools, Spas and Hot Tubs," H titled "Patio Covers" and K titled "Sound Transmission" as published by the International Code Council in cooperation with the International Conference of Building Officials, which codes are specifically incorporated by reference shall be known as the building code. The provisions of said building code shall control the design, construction, quality of materials, erection, installation, addition, alteration, repair, location, relocation, replacement, removal, demolition, use and maintenance of buildings and other structures within the incorporated limits of North Liberty, Iowa.

157.03 AMENDMENTS OF THE INTERNATIONAL BUILDING CODE AND THE INTERNATIONAL RESIDENTIAL CODE.

Certain sections, and portions of sections, of the *International Building Code*, 2015 Edition (hereinafter IBC) and the *International Residential Code for One- and Two-Family Dwellings*, 2015 Edition (hereinafter IRC), are modified as set forth in this section.

1. Delete the following Sections from Chapter One of the IBC and insert in lieu thereof the following:

101.1 Title.

These regulations shall be known as the Building Code of North Liberty, hereinafter referred to as "this code."

101.4 Referenced codes.

The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

101.4.1 Electrical.

The provisions of the Electrical Code adopted by the State of Iowa Electrical Board shall

apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto.

101.4.2 Gas.

The provisions of the 2015 International Fuel Gas Code shall apply to the installation of gas piping from the point of delivery, gas appliances, and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

101.4.3 Mechanical.

The provisions of the 2015 International Mechanical Code shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy related systems.

101.4.4 Plumbing.

The provisions of the 2015 International Plumbing Code shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. The provisions of the International Private Sewage Disposal Code shall apply to private sewage disposal systems.

101.4.5 Property maintenance.

The provisions of the 2015 International Property Maintenance Code shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures.

101.4.6 Fire prevention.

The provisions of the 2015 International Fire Code and as amended in Chapter 158 shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

101.4.7 Energy.

The provisions of the State of Iowa Energy Conservation Code shall apply to all matters governing the design and construction of buildings for energy efficiency.

101.4.8 Existing buildings.

The provisions of the 2015 International Existing Building Code shall apply to matters

governing the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

105.1 Required.

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

105.1.1 Issuance of permits.

No permit shall be issued to an individual who does not have a valid license to perform such work.

105.1.2 Licenses required.

- a) North Liberty contractor license.
- b) State of Iowa electrical contractor license with a class A master electrician for all electrical work defined by the State of Iowa contractor licensing program.
- c) State of Iowa master license for hydronic, mechanical, medical gas and plumbing work defined by State of Iowa contractor licensing program.
- d) National Institute for certification in Engineering Technologies (NICET) Level III for any person designing water based fire protection system.
- e) National Institute for certification in Engineering Technologies (NICET) Level III for any person designing fire alarm system.
- f) City of North Liberty sewer & water installer license.

110.3 Required inspections.

The building official, upon notification, shall make the inspections set forth in Sections 110.3.1 through 110.3.10.

110.3.1 Footing and foundation inspection.

Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.

110.3.2 Concrete slab and under-floor inspection.

Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

110.3.3 Lowest floor elevation.

In flood hazard areas, upon placement of the lowest floor, including the basement, and

prior to further vertical construction, the elevation certification required in Section 1612.5 shall be submitted to the building official.

110.3.4 Frame inspection.

Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

110.3.5 Fire-resistant penetrations.

Protection of joints and penetrations in fire resistance-rated assemblies shall not be concealed from view until inspected and approved.

110.3.6 Other inspections.

In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the department of building safety.

110.3.7 Special inspections.

For special inspections, see Section 1704.

110.3.8 Final inspection.

The final inspection shall be made after all work required by the building permit is completed.

2. Delete the following Section from Chapter Five of the IBC and insert in lieu thereof the following:

501.2 Address numbers.

Approved numbers or addresses shall be placed on all buildings in accordance with the fire code.

3. Amend the following Sections from Chapter Ten of the IBC and insert in lieu the following:

1008.3.3 Rooms and spaces.

5. Public restrooms with an area greater than 50 square feet.

1013.6.2 Exit Sign Illumination.

In new construction, or if an exit sign is replaced, exit signs shall use an LED lighting system and be illuminated internally. Exit signs shall have a battery backup unless an on-site generator set is used. Luminance on the face of an exit sign shall have an intensity of not less than 5.0 foot-candles (53.82 lux).

1013.7 Combination Lights.

Combination exit sign/emergency light devices are prohibited in all new construction.

1013.8 Separation of Emergency Lighting.

In new construction, emergency lighting shall be separated from the exit sign by a minimum of 6 feet.

1013.9 Self-luminous and Photo luminescent exit signs.

Self-luminous and photo luminescent exit signs are not allowed. Exception: Approved self-luminous and/or photo luminescent exit may be allowed in tents by approval of the Fire Official.

1013.10 Self-Testing Exit Signs and Emergency Lights.

Exit signs and/or emergency lights mounted higher than 8 1/2 feet from floor level to the bottom of the exit sign or emergency light or if the exit sign or emergency light is mounted in a location where it cannot be manually tested, the exit sign and/or emergency light shall be self-testing and have a visual diagnostic indicator.

4. Delete the following Section from Chapter Thirteen of the IBC and insert in lieu thereof the following:

1301.1.1 Criteria.

Buildings shall be designed and constructed in accordance with the State of Iowa Energy Conservation Code.

5. Delete the following Sections from Chapter One of the IRC and insert in lieu thereof the following:

R101.1 Title.

These provisions shall be known as the Residential Code for One- and Two-Family Dwellings of North Liberty, and shall be cited as such and will be referred to herein as is "this code".

R105.1 Required.

Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

R105.1.1 Issuance of permits.

No permit shall be issued to an individual who does not have a valid license to perform such work, except for state's exemption for a homeowner that qualifies for a Homestead Tax Exemption.

R105.1.2 Licenses required.

- a) North Liberty contractor license.

- b) State of Iowa electrical contractor license with a class A master electrician for all electrical work defined by the State of Iowa contractor licensing program.
- c) State of Iowa master license for hydronic, mechanical, medical gas and plumbing work defined by State of Iowa contractor licensing program.
- d) National Institute for certification in Engineering Technologies (NICET) Level III for any person designing water based fire protection system.
- e) National Institute for certification in Engineering Technologies (NICET) Level III for any person designing fire alarm system.
- f) City of North Liberty sewer & water installer license.

R105.2 Work exempt from permit.

Permits shall not be required for the following. Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (13.29 m²).
2. Fences not over 7 feet (1829 mm) high.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Swings and other playground equipment.
9. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
10. Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point and do not serve the exit door required by Section R311.4.
11. Reapplication of shingles and roof sheathing provided less than 50% of the sheathing is replaced and other structural alterations are not required.
12. Reapplication of siding.
13. Window replacement provided window opening sizes are not altered and conforming rescue and escape windows are present in all sleeping rooms.

R108.3 Building permit valuations.

The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for

which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment, and permanent systems. The building official shall verify the applicant's valuation by using the most current Building Valuation Data Table published in Building Safety Journal to determine the permit value. Final building permit valuation shall be set by the building official.

6. Modify the following Sections from Chapter Three of the IRC and inserting the following:

R301.2 Climatic and geographic design criteria.

Buildings shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Additional criteria shall be established by the local jurisdiction and set forth in Table R301.2 (1).

Ground Snow Load	Wind (mph)	Seismic Design Category	Subject to Damage From				Winter Design Temp (e)	Ice Shield Underlayment Required (h)	Flood Hazards (g)	Air Freezing Index (i)	Mean Annual Temp (G)
			Weathering (a)	Frost Line depth (b)	Termite (c)	Decay (c)					
25	115	A	Severe	42"	M-H	S-M	-5° F	Yes	8/22/2002	2000	50°F

R302.2 Townhouses.

Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with Chapters 33 through 42. Penetrations of electrical outlet boxes shall be in accordance with Section R302.3.

R302.5.1 Opening protection.

Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches in thickness, solid or honeycomb core steels doors not less than 13/8 inches thick, or 20-minute fire-rated doors.

Delete **R302.13 Fire Protection of Floors.**

Delete **R309.5 Fire sprinklers.**

Delete **R312.2 Window fall protection.**

R313.1 Townhouse automatic fire sprinkler systems.

An automatic residential fire sprinkler system shall be installed in townhouses with five or more units.

Exceptions:

An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential

fire sprinkler system installed.

Delete **R313.2 One- and two-family dwellings automatic fire systems.**

R317.1 Location required.

Protection of wood and wood based products from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative-treated in accordance with AWP A U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWP A U1.

1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (457 mm) or wood girders when closer than 12 inches (305 mm) to the exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
2. All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches (203 mm) from the exposed ground.
3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 1/2 inch (12.7 mm) on tops, sides and ends.
5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches (152 mm) from the ground or less than 2 inches (51 mm) measured vertically from concrete steps, porch slabs, patio slabs, and similar horizontal surfaces exposed to the weather and installed with frost protection methods approved by the Building Official.
6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.
7. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below grade except where an approved vapor retarder is applied between the wall and the furring strips or framing members.
8. Modify the following Sections from Chapter Four of the IRC and inserting the following:

Delete Table R403.1(1) and insert the following table.

TABLE R403.1(1)

MINIMUM WIDTH OF CONCRETE, PRECAST OR MASONRY FOOTINGS (inches) Minimum two #4 reinforcement steel bars shall be placed continuously in the footing minimum of 3" from bottom, top and sides of the footing.

	LOAD-BEARING VALUE OF SOIL (psf)	
	1,500	2,000
Conventional light-frame construction		

1-story	12	12
2-story	15	12
3-story	23	17
4-inch brick veneer over light frame or 8-inch hollow concrete masonry		
1-story	12	12
2-story	21	16
3-story	32	24
8-inch solid or fully grouted masonry		
1-story	16	12
2-story	29	21
3-story	42	32

Delete Tables R404.1.2 (3) and R404.1.2 (8) and insert the following table.

Minimum Vertical Reinforcement for 8-inch Thick Concrete Wall

Wall	Vertical Reinforcement Bar Size and Spacing
Less than 6-ft	Not
6-ft to 8-	#4@ 32" o.c.
9 -ft to 10-	#4@ 10" o.c. #5 @ 16" #6@ 22" o.c.
Greater than 10-ft	Design

157.04 Availability of the Building Code.

An official copy of the building code, including a certificate by the city clerk as to its adoption and effective date thereof, is on file in the office of the city clerk in the administration building, and shall be kept there on file. Copies shall be available at the department of building safety for public inspection. Additionally the *International Building Code, 2015 Edition* and the *International Residential Code for One- and Two-Family Dwellings, 2015 Edition* are available to the public at the North Liberty public library.

157.05 Board of Appeals.

1. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of the North Liberty Building Code, there is hereby established a Board of Appeals consisting of five (5) members who are residents of North Liberty and qualified and experienced in training to pass on matters pertaining to building construction and who are not employees or officials of the City. The terms of office for the members of the Board shall be staggered five-year terms, such that only one regular term expires each year so as to provide continuity in policy and personnel. Each term shall commence on July 1. The Board of Appeals shall be appointed by the Mayor with City Council approval.
2. Any person affected by any written notice or order of the Building Official may appeal to the Board of Appeals. The appeal must be made in writing and filed with the office of the City Clerk within seven (7) days of the written notice or order from which the appeal is

taken. The Board of Appeals shall have no authority to waive the requirements of the Building Code.

3. The Board of Appeals shall conduct a hearing following the filing of a written notice of appeal within the established time limits. The Board shall set a time and place for the hearing. Notice of such hearing shall be posted and be open to the public in compliance with the Iowa open meetings law. The applicant will be advised, in writing of such time and place of hearing at least seven (7) days prior to the date of the hearing. At the hearing, the applicant shall have an opportunity to testify and present evidence to show cause why the notice or order should be modified, extended or revoked. The Board of Appeals may sustain, overrule, modify or revoke a notice or order. A hearing may be continued from time to time for good cause at the request of the applicant, City or the Board. The burden of proof shall be on the applicant.

CITY OF NORTH LIBERTY ADOPTION OF THE INTERNATIONAL FIRE CODE ORDINANCE

An ordinance of the City of North Liberty adopting the 2015 edition of the International Fire Code, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the City of North Liberty; providing for the issuance of permits and collection of fees therefor; repealing Chapter 15.03 of the City of North Liberty Municipal Code and all other ordinances or parts of laws in conflict therewith.

The City Council of the City of North Liberty does ordain as follows:

Section I. That a certain document, one (1) copy of which are on file in the office the City Clerk of the City of North Liberty being marked and designated *International Fire Code*, 2015 edition, including Appendix Chapters B, C, D, E, F, G, H, I, K, L, as published by the International Code Council, be and is hereby adopted as the Fire Code of the City of North Liberty, in the State of Iowa regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the City of North Liberty are hereby referred to, adopted, and made a part hereof, as if fully set out in this legislation, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section II. That the following sections are hereby revised:

Section 101.1. Insert: City of North Liberty

Section 109.4. Insert: Insert: Municipal Infraction, as prescribed in City of North Liberty Municipal Code, Chapter 1.18; Municipal Infraction.

Section 111.4. Insert: \$500, repeat offense \$750.

Section 1103.5.3. Insert: Five years from date of notification.

Section III. That the geographic limits referred to in certain sections of the 2015 *International Fire Code* are hereby established as follows:

Section 3404.2.9.6.1 The storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited in the entire City of North Liberty, Iowa.

Exceptions: I-1 and I-2 Zoning Districts and/or as approved by the Fire Chief.

Section 5706.2.4.4 The storage of Class I and Class II liquids in above-ground tanks is prohibited in the entire City of North Liberty, Iowa.

Exceptions: I-1 and I-2 Zoning Districts and/or as approved by the Fire Chief.

Section 5806.2 The storage of flammable cryogenic fluids in stationary containers is prohibited in the entire City of North Liberty, Iowa. Exceptions: As approved by the Fire Chief.

Section 6104.2 The storage of liquefied petroleum gas is prohibited in the entire City of North Liberty
Exceptions: I-1 and I-2 Zoning Districts and/or as approved by the Fire Chief.

Section IV. Fees. Fees for inspections, re-inspections, plans review, acceptance testing, permits and other services related to enforcement of this Code shall be established by the City Council by resolution and paid to the Fire Department.

Section V. Amendments to the Fire Code. The following sections are amended to read as follows:

Section 104.12 Add a new section to read as follows: The code official is authorized to order an operation or use stopped or the evacuation of any premises, building, or vehicle or portion thereof which has or is a fire, life safety or health hazard.

Section 105.2 Add a sentence to the end of the section to read as follows: Application for an operational permit shall be submitted with all required information not less than 14 days prior to the event requiring a permit.

Section 105.4 Add a sentence to the end of the section to read as follows: The fire code official at their discretion shall send plans to an outside agency for review. The fire code official shall choose the plans review agency. The applicant shall pay all fees associated with the plan review directly to the outside agency. A certificate of occupancy shall not be issued until the review fees have been paid.

Section 105.6 Add a sentence to the end of the section to read as follows: The fire code official at their discretion shall send plans for operational permits requests to an outside agency for review. The fire code official shall choose the plans review agency. The applicant shall pay all fees associated with the plan review directly to the outside agency. The permit shall not be issued until the review fees have been paid.

Section 108 Delete in its entirety. See City of North Liberty Ordinance 99.18; Boards of Appeals.

Section 202 Add a new definition to read as follows: CODE OFFICIAL. The Fire Chief, the Assistant Fire Chief, or the Chief's authorized representative.

Section 307 See also City of North Liberty Ordinance 8.12.020, Section O, Open Burning.

Section 307.1.1 Delete the section and replace with: Prohibited burning. Burning that is offensive or objectionable because of smoke or odor emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Section 307.3 Delete the section and replace with: Extinguishment authority. The fire code official is authorized to order the extinguishment by the responsible person or the fire department of any burning that creates or adds to a hazardous or objectionable situation.

Section 312.3 Delete the words: or visually deter.

Section 401.9 Add a new section to read as follows: Building evacuation. Upon activation of the building fire alarm system or upon notification by other means of detecting and reporting unwanted fire, all building occupants shall promptly evacuate the building. Building employees and tenants shall implement the appropriate emergency plan and procedures. Exception: When the emergency evacuation plan, as approved by the fire code official, does not require the immediate total evacuation of the building.

Section 405.2 Add to the end of the section as follows: Fire and evacuation drills in Group E occupancies, excluding daycares and preschools shall be conducted in accordance with Section 100.31 of the Code of Iowa. Emergency evacuation/fire drills shall be conducted at least four times a year. Not less than two drills shall be conducted between July 1 and December 31 of each year and not less than two drills shall be conducted between January 1 and June 30 of each year. The North Liberty Fire Department shall conduct one of the two drills during July 1 and December 31 and one of the two drills during January 1 and June 30 of each year. The fire department emergency evacuation/fire drills shall be unannounced.

Section 405.2 Table Add footnote e. as follows: Group E occupancies, excluding Preschools and Daycares shall conduct fire and evacuation drills at least four times a year in accordance with Section 100.31 of the Code of Iowa. Footnote shall be added to Group E occupancy frequency.

Section 503.1.1 Delete exception 1.1 and replace with: The dimension can be increased up to 200 feet if the building is equipped throughout with an approved NFPA 13 automatic sprinkler system.

Section 505.1 Delete the section and replace with: Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall contrast with their background. Address numbers and exterior suite numbers shall be in Arabic numerals or alphabet letters a minimum of 4 inches in height with a minimum stroke width of 1/2 inch. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Exterior address location for commercial buildings shall be determined by the Code Official

Exceptions:

1. Monument signs shall have the address installed a minimum of 36 inches from the ground.
2. Addresses located 100 to 199 feet from the street shall have a minimum of 6 inches in height with a minimum stroke width of 1/2 inch. Addresses located 200 to 299 feet from the street shall have a minimum of 8 inches in height with a minimum stroke width of 1 inch. For each additional 100 feet from the street, the number shall increase by an additional 2 inches in height with the stroke increased proportionally. Measurements to determine the minimum number or letter size shall be measured from the approved address location to the center line of the street for which the premise is addressed. Minimum height and minimum stroke may be increased by the Code Official.
3. Interior suite numbers shall be a minimum of 3 inches in height.

Section 505.3 Add a new section to read as follows: Addresses for Buildings under Construction. All new commercial and residential buildings under construction shall have plainly visible addresses from the street. The temporary address sign shall be approved and issued by the City of North Liberty Building Department and be placed no further than 10 from the street. Additional address signage may be required at the discretion of the code official.

Section 506.1 Add a sentence to the end of the section to read as follows: An approved key box shall be installed in accordance to the City of North Liberty Ordinance 15.34, Key Lock Box.

Section 507.3 Delete the section and replace with: Fire flow. Fire flow requirements for buildings or portions of buildings shall be determined by "Appendix B" of this code.

Section 507.5.1 Delete exceptions 1 & 2.

Section 507.5.1.1 Delete section and add a new section to read as follows: Fire Sprinkler System & Standpipe System Support. A fire hydrant shall be located no more than 100 feet from a fire sprinkler or standpipe system connection on hard surface, easily accessible by fire apparatus and meeting the approval of the Code Official.

Section 507.5.7 Add a new section to read as follows: Fire Hydrant Installation

Section 507.5.7.2 Add a new section to read as follows: Fire hydrant outlet direction: All fire hydrants shall be positioned so that the four and one-half (4 1/2) inch connection is facing the street or driveway accessible to fire department apparatus.

Section 507.5.7.3 Fire hydrants threads: All new fire hydrants within the limits of the city of North Liberty shall have National Standard Threads (NST) on the two and one-half (2 1/2) inch connections and the four and one-half (4 1/2) inch connection will have a Storz connection.

Section 507.5.7.4 Flow: The minimum flow requirements for a water main serving a fire hydrant is the rate of water flow, at a residual pressure of twenty pounds per square inch (20psi) and for a specified duration, as specified in appendix B of this code.

Section 507.5.7.5 Add a new section to read as follows: Fire Hydrant height: Fire hydrants shall be installed a minimum of eighteen (18) inches from the nominal ground level to the center of the lowest water outlet.

Section 510.1 Delete exceptions 1 & 2.

Section 605.10 Delete the section and replace with: Portable, electric, space heaters. Portable electric space heaters shall comply with Sections 605.10.1 through 605.10.5.

Section 605.10.5 Add a new section to read as follows: Fully enclosed. Portable, electric space heaters shall be fully enclosed space heaters that by design have no external surfaces that reach temperatures capable of igniting materials placed against the surface.

Section 607.7. Add a sentence to the end of the section to read as follows: The required elevator keys shall be secured in an approved elevator key box in an approved location by the Fire Code Official.

Section 609.4 Delete the last sentence and replace with: Movement of new and existing cooking appliances with caster(s) under a Type I hood shall be limited by an approved floor mounted restraining device and flexible gas connector installed in accordance with the connector and appliance manufacturer's instructions.

Section 609.5 Add a new section to read as follows: Required separation. All deep-fat fryers shall be installed with at least 16 inch space between the fryer and surface flames from adjacent cooking equipment. Where a steel or tempered glass baffle plate is installed at a minimum 8-inch height between the fryer and surface flames to the adjacent appliance, the requirement for a 16-inch space shall not apply.

Section 609.6 Add a new section to read as follows: Kitchen Hood Exhaust Fan Hinge Requirement. New and existing Type I hood kitchen hood exhaust/up blast fans shall be installed with listed hinges, weatherproof electrical cable and hold open retainer for servicing and cleaning.

Section 803.11 Add a new section to read as follows: Maintenance. The interior finish of buildings shall be maintained in accordance with the conditions of original approval. Any change to the interior finish that is regulated by the provisions of this code or the building code shall be made in accordance with all applicable requirements.

Section 806.1 Add a sentence to the end of the section to read as follows: Natural or resin-bearing cut trees and natural decorative vegetation used in buildings open to the general public shall be properly treated with an approved flame retardant.

Section 806.1.1 Delete the section and replace with: Restricted occupancies. Natural cut trees shall be prohibited in Group A, B, E, I-1, I-2, I-3, I-4, M, R-1, R-2 and R-4 occupancies.

Exception:

- 1) Trees located in areas protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 shall not be prohibited in Groups A, B, E, M, R-1 and R-2.
- 2) Trees shall be allowed within dwelling units in Group R-2 occupancies.

Section 807.5.2.1 Delete exceptions 1 & 2.

Section 901.2 (a) Add a new section to read as follows: Water based fire protection systems. Working plans submitted to the fire department for water based fire protection systems shall be stamped and approved by a qualified person to be in compliance with applicable NFPA standards and the North Liberty Fire Code. Any changes to the working plans shall be approved by a qualified person. A qualified person shall have a minimum National Institute for Certification in Engineering Technologies [NICET] Level III certification for Automatic Sprinkler System Layout OR be a licensed engineer with experience in life safety system design. Other qualifications may be approved by the code official.

Section 901.2 (b) Add a new section to read as follows: Fire alarm systems. Working plans submitted to the fire department by a qualified person for fire alarm systems shall be stamped and approved by a qualified person to be in compliance with applicable NFPA standards and the North Liberty Fire Code. Any changes to the working plans shall be approved by a qualified person. A qualified person shall have a minimum National Institute for Certification in Engineering Technologies [NICET] Level III certification for Fire Alarm Systems OR be a licensed engineer with experience in life safety system design. Other qualifications may be approved by the code official.

Section 901.6.2.2 Add a new section to read as follows: Inspection Record Submission. Contractors who perform installation, inspection, testing and/or maintenance services on fire and life safety systems are required to electronically submit all installation and compliant & non-compliant inspection reports to the Fire Department via a method approved by the Fire Code Official within 30 calendar days of the installation/inspection date. Reports submitted after 30 calendar days may incur late fees.

Section 901.7 Add a sentence to the end of the section to read as follows: A person assigned to firewatch must walk through the building at least once every 30 minutes checking for fire or smoke. A firewatch must be continued until the fire alarm system and/or fire protection system has been restored to normal operating condition or the building has been evacuated. A competent adult familiar with the building must conduct the firewatch. If a fire is discovered, call 911 and immediately evacuate the building.

Section 903.3.1.1.2 Delete the section and replace with: Bathrooms. Sprinkler protection shall be provided in all bathrooms in NFPA 13 & NFPA 13R systems regardless of the bathroom size.

Section 903.3.5.3 Add a new section to read as follows: Water supply safety margin. Provide a minimum 10%, but not less than 5 psi, safety margin below the available water supply flow test curve at full system demand and required hose stream allowances. Flow test must have been conducted within 90 days of the fire sprinkler plan submittal to the city and third party reviewer (if applicable).

Section 903.3.5.4 Add a new section to read as follows: Fire Sprinkler Riser Room. Fire sprinkler riser room shall be separated from electrical room and have no electrical panels inside the rooms other than the outlets required for the use of the fire sprinkler system or fire alarm panel. The fire sprinkler riser room shall have an exterior access door and a floor drain. The room shall have a hard cleanable walking from the fire department access road.

Exception: Non-mixed use R-2 Occupancies and approval by Code Official.

Section 903.4.2 Delete the section and replace with: Alarms. An approved weatherproof horn/strobe device shall be mounted directly above the fire department connection between seven (7) and ten (10) feet in height above grade. The water-flow alarm device shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Approved and supervised audible visual notification appliances shall be installed throughout each level of the interior of the building as required by the fire code official and NFPA 72.

Section 903.5 Add a sentence to the end of the section to read as follows: An inspector's test valve is required at the most remote location in each fire sprinkler system or tenant/floor control valve space, for use at the acceptance test and to remove air from the system after maintenance work is done on the system.

Section 903.7 Add a new section to read as follows: Zones. Automatic sprinkler system zones shall not exceed the area permitted by NFPA 13 or NFPA 13R and shall provide a sprinkler control valve and water flow device for each normally occupied floor or normally occupied space in a multi-tenant building. Except by approval of the fire code official, all control valves shall be located in the sprinkler system riser room.

Section 903.8 Add a new section to read as follows: Fire sprinkler for canopies. A canopy covering a door that is required to be marked as an exit shall be required to have fire sprinklers installed outside that door if the canopy extends more than 4 feet out from the door and is 12 feet or less in height from the ground regardless of whether the canopy is combustibile or noncombustibile. Canopies that have vehicle access under them with door openings shall be required to have fire sprinklers installed under the total canopy regardless of whether the canopy is combustibile or non-combustibile. Exception: If the Code does not require a building to have a fire sprinkler system, section 903.8 does not apply.

Section 904.12.2.1 Add a new section to read as follows: System Annunciation. Commercial cooking automatic fire extinguishing systems installed in buildings that do not have a fire alarm system, shall be connected to an approved audible and visible emergency notification device to warn of system discharge. The horn/strobe and signage shall be installed in a location approved by the fire code official, typically in the kitchen.

Section 904.12.6.4 Add a new section to read as follows: Ventilation Operation. The ventilation system shall shut down the make-up air to the hood and continue to exhaust upon activation of the hood fire extinguishing system. Supply air openings other than part of the hood system shall be a minimum of 6 feet from any part of a Type 1 Hood. Supply air openings closer than 6 feet must shut down upon activation of the extinguishing system. Exception: Section 904.12.6.6 may be revoked if the fire extinguishing agent will not perform to specifications due to exhausting requirements.

Section 905.1.1 Add a new section to read as follows: Delete all references to class II standpipe system and replace with class III standpipe systems.

Section 905.3.9 Add a new section to read as follows: Additional Standpipe Systems: Additional standpipe systems may be added to new buildings or structures as deemed necessary by the Code Official.

Section 905.9 Delete exception 2 without substitution.

Section 906.1 Delete the exception without substitution.

Section 906.3 Add a sentence to the end of the section to read as follows: The minimum size and rating of any required portable fire extinguisher for Class A, Class B, or Class C hazard shall be 5lb. 2-A, 10-B C.

Section 907.1.4 Add a new section to read as follows: Fire alarm control panels and Fire alarm annunciator panels. Installation of fire alarm control panels and fire alarm annunciator panels shall be installed in accordance with section 907.1.4.1 through 907.1.4.5

Section 907.1.4.1 Add a new section to read as follows: Fire Alarm Panel Height: Installation of fire alarm panels shall not exceed 6 feet in height measured from the floor to the top of the panel. Exception: Panel height may be altered by the code official.

Section 907.1.4.2 Add a new section to read as follows: Number of Fire Alarm Control Panels in Buildings: Only one listed fire alarm control panel shall be allowed per building and shall lock in the alarm until the system is reset and shall not be canceled by the operation of an audible – alarm silencing switch. This control panel shall only receive alarm signals from fire protection equipment.

Section 907.1.4.3 Add a new section to read as follows: Combination Fire/Security Alarm System Panels. A listed combination fire/security alarm system panel that meets all the requirements of this code and amendments may be permitted by approval of the fire code official. The fire/security panel shall be capable of providing a signal that can differentiate between the fire and security alarm.

Section 907.1.4.4 Add a new section to read as follows: Password/PIN Protection Prohibited: Fire alarm control panels and/or fire alarm annunciator panels that require a password/PIN to silence an alarm/supervisory/trouble signal and/or to reset an alarm/supervisory/trouble signal shall be prohibited.

Section 907.1.4.5 Add a new section to read as follows: Fire Alarm Annunciator Panels: The fire code official can require addition fire alarm annunciator panels based on the size of building and access to the building, these panels shall meet the requirements of 907.1.4 and 907.2.

Section 907.2 Delete the section and replace with: Where required new buildings and structures. An approved and addressable manual, automatic or manual and automatic fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with 907.10, unless other requirements are provided by another section of this code. A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm system employing automatic fire detectors or water-flow devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions:

- 1) The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.
- 2) The manual fire alarm box is required for Group R-2 occupancies to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. The manual fire alarm box shall not be located in an area that is accessible to the public.
- 3) Multi-tenant buildings required to have a manual/automatic fire alarms system shall install one manual pull station per tenant space.

Section 907.2.1.2 Add a new section to read as follows: Electrical Shunt for Amplified Sound Conditions. Group A occupancies having an occupancies having an occupant load of 300 or more, electrical shunts shall be provided to de-energize the music or sound systems upon fire alarm activation.

Section 907.2.11.2 Modify by adding a fourth location requirement as follows: 4) Supervised smoke detectors shall be installed in all common corridors and at the top and bottom of all stairway enclosures in Groups R-2, R-4 and I-1 occupancies. In corridors, detectors shall be located within fifteen (15) feet of the end of the corridor and in such a way that one detector is located for each thirty (30) feet of corridor length or spaced as allowed by the code.

Section 907.4.2 Add a sentence to the end of the section to read as follows: Where in the opinion of the code official manual fire alarm boxes may be used to cause false fire alarms, the code official is authorized to modify the requirements for manual fire alarm boxes.

Section 907.5.2.3.4 Add a new section to read as follows: Alarm Signal Deactivation. Both audible and visual appliances shall shut off when the signal silence feature is activated on the fire alarm control panel or the fire alarm annunciator panel. Exception: Exterior water flow horn/strobe.

Section 907.6.4.3 Add a new section to read as follows: Zone and address location labeling. Fire alarm and/or annunciator panels shall have all zones and address points plainly and permanently labeled as to their location on the outside of the panel or on an easily readable map of the building, if no display is present.

Section 907.6.6 Delete the section and replace with: Monitoring. Fire alarms required by this chapter, the International Building Code, or the Code Official, an approved UL listed Central Station service in accordance with NFPA 72 shall monitor fire alarm systems to provide for the immediate and automatic notification of the Fire Department. Exception: Monitoring by a supervising station is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.11.
2. Smoke detectors in Group I-3 occupancies.
3. Automatic sprinkler systems in one- and two-family dwellings
4. Fire alarm systems in one- and two-family dwellings

Section 907.6.6.3 Add a new section to read as follows: Each address point id shall have an alpha/numeric descriptor location. Alpha/numeric descriptor locations are required to be reported to the Emergency Communications/Dispatch Center upon activation of a water-flow tamper and/or alarm conditions as specified by the fire code official.

Section 907.10 Add a new section to read as follows: Approved hold-open devices. When installed in buildings that have a fire alarm system and/or sprinkler system, all approved hold open devices shall release upon activation of a fire alarm and sprinkler water-flow activation.

Section 912.4.1 Delete the sentence and replace with: Locking fire department connections caps. Locking fire department connections caps approved by the fire department are required for all new construction that have a water-based fire protective system and existing structures that have a water-based fire protective system immediately after conducting the five year obstruction and maintenance testing or if one or more of the fire department caps are missing.

Section 912.8 Add a section to read as follows: Fire Department Connection Height. The fire department connection shall be located not less than 18 inches from the bottom of the cap(s) and not more than 3 feet from the top of the cap(s) above the level of the adjacent grade or access level. Deviation from this

height may be granted by the Code Official for just cause.

Section 912.9 Add a section to read as follows: Size. Minimum fire department connection size shall be 2 ½" National Standard Thread.

Section 1008.3.3 Delete number 5 and replace with: 5. Public restrooms with an area greater than 50 square feet.

Section 1013.6.2 Delete the section and replace with: Exit Sign Illumination. In new construction, or if an exit sign is replaced, exit signs shall use an LED lighting system and be illuminated internally. Exit signs shall have a battery backup unless an on-site generator set is used. Luminance on the face of an exit sign shall have an intensity of not less than 5.0 foot-candles (53.82 lux).

Section 1013.7 Add a new section to read as follows. Combination Lights: In new construction, combination exit sign/emergency light devices shall not be allowed.

Section 1013.8 Add a new section to read as follows: Separation of Emergency Lighting. In new construction, emergency lighting shall be separated from the exit sign by a minimum of 6 feet.

Section 1013.9 Add a new section to read as follows: Self-luminous and Photoluminescent exit signs. Self-luminous and photoluminescent exit signs are not allowed.
Exception: Approved self-luminous and/or photoluminescent exit may be allowed in tents by approval of the Code Official.

Section 1013.10 Add a new section to read as follows: Self-Testing Exit Signs and Emergency Lights. Exit signs and/or emergency lights mounted higher than 8 1/2 feet from floor level to the bottom of the exit sign or emergency light or if the exit sign or emergency light is mounted in a location where it cannot be manually tested, the exit sign and/or emergency light shall be self-testing and have a visual diagnostic indicator.

Section 1013.11 Add a new section to read as follows: Exit Signs and Emergency Lights. Exit signs and/or emergency lights that are not self-testing and do not have a visual diagnostic indicator shall be on a dedicated electrical circuits for the purpose of conducting monthly and yearly testing requirements; the circuits shall have lockable breakers.

Section 1013.12 Add a new section to read as follows. Additional Exit Signs: Exit signs may be required at the discretion of the code official to clarify an exit or exit access.

Section 1103.1.2 Add a new section to read as follows: Existing fire alarm systems monitoring requirements. Existing fire alarms systems that are currently not monitored by an approved UL listed Central Station shall become monitored within 1 year from receiving notice in accordance with section 907.6.6.

Section 1103.1.3 Add a new section to read as follows: Existing sprinkler systems monitoring requirements. Existing sprinkler systems shall have all valves controlling the sprinkler system and water flow electrically supervised and monitored by an approved UL listed Central Station in accordance with sections 903.4 and 903.4.1 within 1 year from receiving notice.

Section 5003.11.3.6 Add a new section to read as follows: Tier II Reporting. Facilities reporting hazardous chemical inventories in excess of their Threshold Planning Quantities pursuant to Section 312 of the Emergency Planning and Community Right to Know Act shall use an approved electronic "Emergency and Hazardous Chemical Inventory" form or show reason to use paper forms and submit the electronic or paper form prior to March 1 of each year.

Section 5601.1.3 Delete exception 4 and insert in lieu thereof: The possession, storage, sale, handling and use of gold star producing sparklers on wires which contain no magnesium or chlorate or perchlorate, flitter sparklers in paper tubes that do not exceed one-eighth of an inch in diameter, toy snakes which contain no mercury or caps used in cap pistols.

Section 5704.2.9 Add a sentence to the end of the section to read as follows: For above ground storage tanks of 276 gallons capacity or more, the minimum distance between such above ground tanks and any Residential Zone boundary must be at least 100 feet. If the above ground tank is located in an approved vault, the minimum separation distance from a Residential Zone boundary may be reduced to no less than 50 feet.

Section 5704.2.11.1 Add a #4 to the end of the section to read as follows:

4. A minimum distance of ten (10) feet shall be maintained between underground tanks and any Residential Zone boundary.

Section 5704.2.13.2.4 Add a section to read as follows: Existing above-ground tank hazards. Existing above-ground tank installations, even if previously approved, that are determined to constitute a hazard by the fire code official, shall not be continued in service. Unsafe tanks shall be removed as required by the fire code official and in accordance with this code.

Section 5705.5.1 Add an exception to read as follows:
6. Corridor installations are prohibited in Group-E occupancies.

Section 45 Referenced Standards. Amend the NFPA referenced standards list to reflect the most current NFPA editions.

Appendix D, Fire Apparatus Roads, Table D103.4. Delete 96' Diameter Cul-de-sac and replace with Public and private turnarounds shall be a minimum eighty (80) foot diameter cul-de-sac with no obstructions or parking within the cul-de-sac.

Appendix D, Multiple-Family Residential Developments. Add section D106.4 Multi-family dwelling units are defined in this section any dwelling unit constructed under the International Building/Fire Code.

Appendix D, One- or Two Family Residential Developments. Add section D107.3 One- or Two Family dwellings units are defined in this section as any dwelling unit constructed under the International Residential Code.

SECTION VI. REPEALER. All ordinances and parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed.

SECTION VII. SEVERABILITY. That if any section, subsection, sentence, clause or phrase of this legislation is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The City of North Liberty City Council hereby declares that it would have passed this law, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

That nothing in this legislation or in the Fire Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 4 of this law; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

SECTION VIII. EFFECTIVE DATE. This Ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted shall be in full force and effect after its final passage, approval and publication, as provided by law. PASSED AND APPROVED this XX day of XXXX, 2016.